

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008501**Date Inspected:** 14-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Xu Le Feng, You Qi Guo, Tu Jun			CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No N/A
				Delayed / Cancelled:	Yes	No N/A

Bridge No: 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector, George Goulet, proceeded to the Bay 11 in response to a ZPMC notification of witness inspection #3960 for MT inspection of the following:

This QA Inspector, George Goulet, performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as NSD1-TL8B/L. The weld designation reviewed was 4A. Prior to performing MT, Caltrans OSM QA Inspector Paul Dawson performed VT of the above noted weld.

Bay 11

This QA Inspector, George Goulet, also randomly observed the following work in progress in Bay 11:

FCAW repair buttering welding of weld joint WSD1-A801-P1833 on west tower skirt plate using T-WR1935. Welder was identified as 066882. ZPMC QC was identified as CWI Xu Le Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Shao Hai Long, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-345-FCAW-2G (2F)-repair.

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Bay 10

This QA Inspector, George Goulet, also randomly observed the following work in progress in Bay 10:

SMAW welding of weld joints NSD1-FESA4-1C/C-12, 14A located on north tower, lift 4, skin A. Welder was identified as 050089. ZPMC QC was identified as CWI Tu Jun (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yu Zhi Lai, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-B-T-3312-Tc-P5-1 for the PJP weld and WPS-B-T-3312-Tc-U5b-1 for the CJP weld. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

SMAW welding of base metal repairs on SSD1-FASA3-1A/E located on south tower, lift 3, skin A. Welder was identified as 050289. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-345-SMAW-3G(3F) except that this QA Inspector, George Goulet, observed that the verticle welding had been done in a downward progression. This QA Inspector, George Goulet, generated an incident report for the noted downward progression welding, citing AWS D1.5 (2002) Section 4.6.8 (SMAW): "The progression for all passes in the vertical position shall be upward, unless a downward progression is qualified by tests approved by the engineer." Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above, and this QA Inspector, George Goulet, asked each QC monitoring the welding if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC showed this QA Inspector, George Goulet, that QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all QC observed did appear to comply.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet, George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer
